Toward a Management Plan

for the

Seal Heritage River

prepared by
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February 1990

The Canadian Heritage Rivers System

Manitoba
Natural Resources
Parks

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EXECUTIVE SUMMARY

Since 1978, Environment Canada has been working with the provinces and territories toward the development of the Canadian Heritage Rivers System (CHRS). To date, seventeen rivers have been nominated and accepted by the Canadian Heritage Rivers Board for inclusion in the CHRS. Of these, nine have been formally designated as Canadian Heritage Rivers. The river designation process follows four main steps: i) background study of the river's resources; ii) nomination and acceptance of the river to the CHRS; iii) preparation of a river management plan; and iv) official designation. In June 1987, the Canadian Heritage Rivers Board accepted the Province of Manitoba's nomination of the Seal River for designation. Manitoba Department of Natural Resources - Parks Branch (DNR) has begun preparation of a river management plan on behalf of the province. The first half of the planning process has included public and government consultation to develop a draft plan. The second half of the process will review the draft plan with government agencies and the public, and see a final product recommended to Manitoba's Minister of Natural Resources by Spring, 1990.

This draft plan sets guidelines for the conservation, protection, administration and use of the river's resources and heritage values. Land management remains within provincial jurisdiction, present and traditional uses are accommodated, and the potential for future native land claims is recognized. Recreational use and enjoyment of the Seal River are realized and enhanced through the recommending of facilities and services consistent with management objectives. Recommendations for resource use in the plan reflect the present ideal of heritage value protection and enhancement consistent with Heritage River status, and maintain options for resource use such as hydro-electric and mining development should provincial priorities change.

The plan identifies a Heritage River corridor which consists of the 260 km length of the Seal River from its headwaters at Shethanei Lake to its outflow at Hudson Bay, and one km on either side of the river. Resource use and development potentials and conditions specified for the corridor range from preservation to resource extraction and recreation infrastructure development. Nine Special Management Areas and two Special Development Areas within the corridor are also identified. These areas direct the use and management of sensitive natural features, archaeological sites, scenic areas, and tourism development within the overall Heritage River corridor.

A framework for ongoing river management, operation and review is provided. The gathering of baseline information and the implementation of a "river steward" program to monitor water quality, sensitive areas, resource use and heritage resources are recommended. The opportunity for local community input into river management is provided through the proposed establishment of a Heritage River advisory board. Comprised of representatives from Churchill and Tadoule Lake, this board would liase with DNR to address regional concerns regarding Heritage River management.

1.0 - INTRODUCTION

The Canadian Heritage Rivers System (CHRS) has been established jointly by federal, provincial and territorial governments for the purpose of recognizing the outstanding rivers of Canada for the benefit and enjoyment of Canadians. Canadian Heritage Rivers are to be managed such that:

a) their natural heritage is conserved and interpreted;
b) their human heritage is conserved and interpreted;
c) the opportunities they possess for recreation and heritage appreciation are realized by residents of and visitors to Canada.

To qualify for inclusion in the system, a river or section of a river must be of outstanding significance for its natural or human heritage, or its recreational resources. To date, nine rivers across Canada have been designated as Canadian Heritage Rivers, including the Bloodvein River in Manitoba.

The process for designating rivers into the system follows four main steps. First, a background study is done to assess both the river's heritage values in terms of CHRS criteria and its overall significance and suitability for Canadian Heritage River status. If a river meets these overall requirements, a nomination document is then prepared and submitted for acceptance to the CHRS board, formally nominating the river to the system. The third requirement for designation stipulates that a river management plan must be lodged within three years of acceptance of the nomination. The final step, river designation, occurs after the submittal of the management plan to the CHRS Board.

In June 1987, the CHRS board accepted the Province of Manitoba's nomination of the Seal River for designation as a Canadian Heritage River. A background study had previously determined that the river meets and surpasses the requirements for nomination. Key natural heritage resources include spectacular esker landscapes, freshwater-adapted harbour seals, and a significant concentration of beluga whales at the river's estuary on Hudson Bay. Key human heritage resources include a legacy of archaeological and sacred sites perhaps as old as 6,000 years, including campsites from Samuel Hearne's journeys across the barren grounds in 1770 and 1771. These features and the unspoiled wilderness of the transition zone between the boreal forest and the tundra combine to offer an outstanding whitewater wilderness recreational experience that has attracted international attention in recent years.

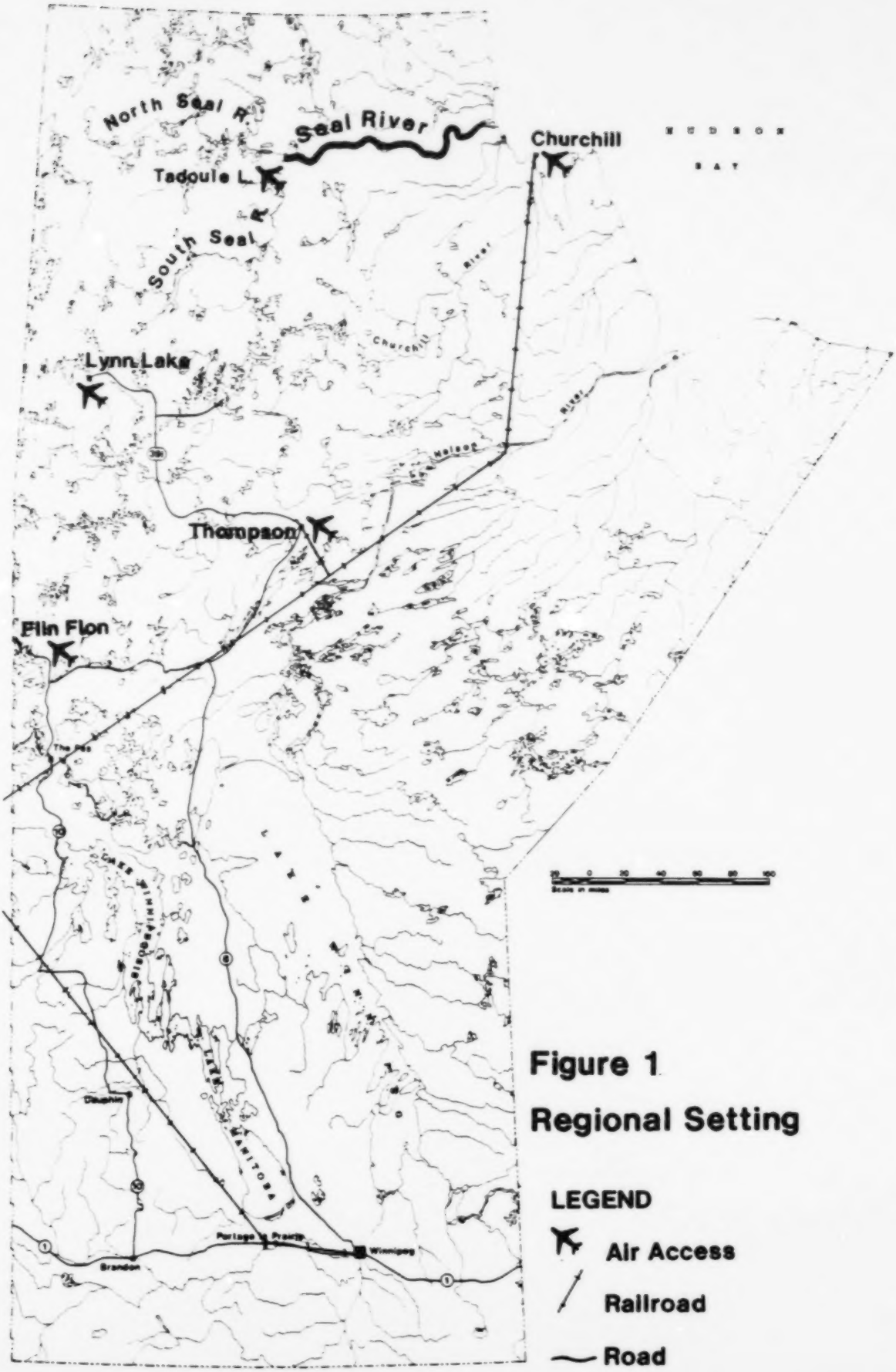


Figure 1

Regional Setting

February 1990

2.0 - SEAL RIVER PLANNING PROCESS

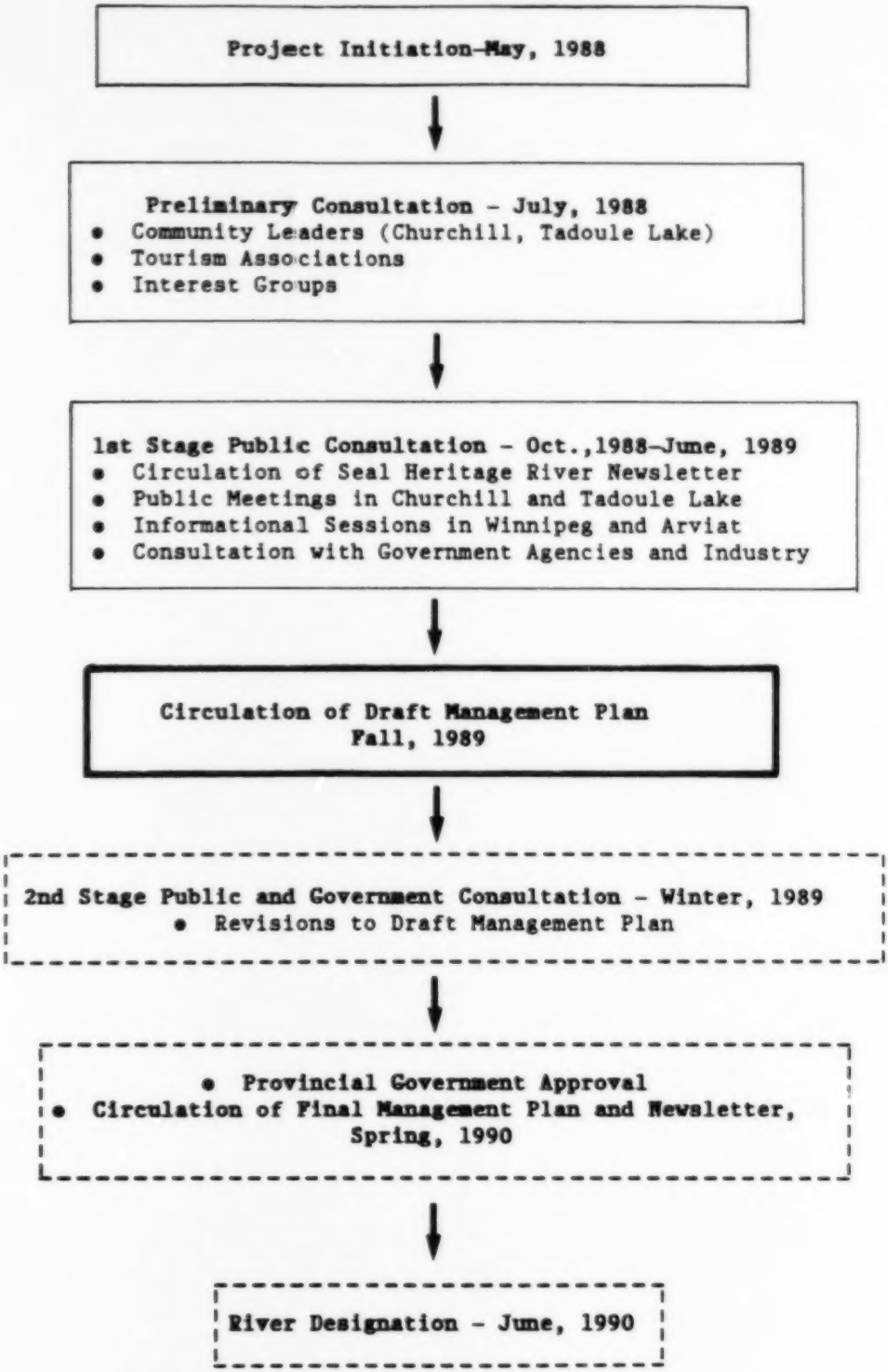
The Seal Heritage River Management Plan is being developed through the public and government review process outlined in Figure 2. Preliminary consultation was held with Churchill and Tadoule Lake town and band councils, business and industry representatives, tourism association heads and members of the scientific community in order to introduce the Heritage River concept and to identify initial concerns and needs of area residents. These initial contacts were followed by a newsletter and a series of open houses held in Churchill and Tadoule Lake in the fall and winter, 1988 to assist in preparation of the first draft. The input of Arviat, N.W.T. (previously Eskimo Point) residents was also solicited through consultation with community representatives in June 1989.

Government review of the CHRS concept began concurrently with the public review, through consultation with member agencies of the Manitoba Interdepartmental Planning Board, the northern Regional Planning Committee (Thompson) and other government bodies. Public and government responses obtained during this first phase are presented in Section 3 of this document.

The publication of this draft plan begins the second major stage of review. DNR is committed to continuing the established consultation process with the public, industry and resource managers. Further public and government review and input will be solicited in this stage, and changes will be made to the plan as needed before the final plan is submitted to the provincial government for approval.

Figure 2

THE SEAL RIVER PLANNING PROCESS


Project Initiation–May, 1988
Preliminary Consultation - July, 1988
• Community Leaders (Churchill, Tadoule Lake)
• Tourism Associations
• Interest Groups
1st Stage Public Consultation - Oct.,1988–June, 1989
• Circulation of Seal Heritage River Newsletter
• Public Meetings in Churchill and Tadoule Lake
• Informational Sessions in Winnipeg and Arviat
• Consultation with Government Agencies and Industry
Circulation of Draft Management Plan
Fall, 1989
2nd Stage Public and Government Consultation - Winter, 1989
• Revisions to Draft Management Plan
• Provincial Government Approval
• Circulation of Final Management Plan and Newsletter,
Spring, 1990
River Designation - June, 1990

3.0 - BACKGROUND

Six general information categories have emerged from the planning process to form the basis for development of the plan. They are: the river's heritage values, recreational use, mining, hydro, native use and public opinion. Each of these categories is examined below in terms of its existing and potential implications for Heritage River designation and management.

3.1 HERITAGE VALUES

Ten guidelines are used in the CHRS program to assess a river's significance. Four guidelines deal with a river's natural heritage, four with its human heritage and two with its recreational values. Nine of these ten guidelines can be met by the Seal River. A summary of the Seal River's significant resource values is provided below for each CHRS guideline. The location of these resources and features along the river is shown in Figure 3.

3.1.1 **Natural Heritage Values:** All four CHRS natural heritage value guidelines are met by the Seal River:

1. Representation of Earth's History: The Seal River contains outstanding examples of recent earth history both superimposed on and modified by the underlying Precambrian rock, representative of the oldest era of earth history, including:

   - spectacular evidence of glaciation including massive eskers, the largest drumlin field in northern Manitoba, and extensive boulder fields;
   - evidence of fluvial erosion and deposition provided by scenic gorges, extensive rapids, beaches, spits and bars;
   - evidence of ancient inland oceans;
   - evidence of the earth's crust rising at geologically significant rates.

2. Representation of Ongoing Processes: Many of the processes which have created the natural features now present in the river system are still active in the area.

- fluvial processes are well represented throughout. The river has frequent lengthy rapids including Nine-bar Rapids, a 3 km. uninterrupted stretch of boulder white-water. Gorges, ice-scour phenomena and Great Island are sites demonstrating the interplay of ancient Precambrian bedrock and recent fluvial processes;

- the Tyrrell Sea recession and some of the world's most dynamic crustal rebound processes are represented at many sites;

- the transition from open boreal forest to tundra along the river's course provides an outstanding opportunity to view a complex mixture of plant and animal communities over a short distance.

3. Physiographic and Landscape Uniqueness: The Seal River contains several examples of outstanding natural physical features including:

   - eskers that extend for several tens of kilometres; rising 30 m in height and 300 m in width, they are areas of exceptional beauty and are the most prominent landscape features in northern Manitoba;

   - Bastion Rock, a monolithic pillar 20 m high towering in the middle of the south channel around Great Island, the single most dramatic physical feature on the river;

   - felsenmeer, areas of frost-shatterd boulders, which give many areas of the river a "moonscape" quality.

4. Biotic Uniqueness: The river has a unique combination of biological phenomena seen nowhere else in Canada. In addition to the river's representative diversity of northern wildlife and vegetation, the Seal River offers the following outstanding features that contribute to its overall uniqueness:

   - harbour seals that give the river its name are found throughout its entire course, 160 km or more inland; this may be a significant adaptation to a freshwater environment by a marine mammal, and is possibly most pronoumced worldwide on the Seal River;

   - a beluga whale population of up to 3,000 that comes to rear young and feed in the waters of the estuary at Hudson Bay, an accessible visual experience unsurpassed in Canada where similar concentration areas are at the mouths of silt-laden streams, or in extremely remote locations;

   - a colony of cliff swallows nesting on Bastion Rock at the northern limit of their range;

   - summer and fall concentrations of polar bears that roam the Hudson Bay coast awaiting freeze-up;

North Seal River
Shee-than-nee
Arch.Site
Shethanei Lake
South Seal River
Arch.Site
Tadoule
Lake 40km

Wolverine River

Big Spruce River

Arch.Site

Gorge

Seal

River

Arch.Site

Gorge

Great Island

Mining Camp

First Areas of Tundra

Nine Bar Rapids

Drumlin Field

Gorge

Bastion Rock
(Cliff Swallow Colony)

Arch.Site

Legend

Esker

Rapids

2.5 0 2.5 5.0 7.5
km

Figure 3

Significant Resources and Features

Seal River

Draft Heritage River Management Plan

February 1990

3.1.2 **Human Heritage Values:** The Seal River was not nominated to the CHRS on the basis of human heritage values. However, archaeological studies completed in support of preparation of this plan have determined that the river has the potential to meet three of four human heritage guidelines. The four guidelines are:

1. River's Impact on the Historical Development of Canada

   - this guideline is not met. The Seal River was not a major transportation route in the region, nor did it play a significant role in the fur trade, exploration or other post-European contact commercial activities.

2. River's Association with Persons, Events, Movements, Achievements

   - the Seal River is associated with Samuel Hearne who followed it on foot and camped on Shethanei Lake for three weeks during his legendary search for copper mines through the barrengrounds in 1770-71.

3. Concentrations and Importance of Historical or Archaeological Structures

   - there is a high concentration of prehistoric and historic artifacts found along the river, some of which may be several thousand years old. This concentration of remains suggests that the Seal River was a focus of activity for the area's first inhabitants, and that the river's resources were important in their life strategies. Of particular significance are sites on eskers, where semi-permanent prehistoric campsites and tool-making sites are found adjacent to the river. These represent a significant occupation and land/water use by Canada's first people.

4. Preservation of the River Environment Relative to its Relevant History

   - other than the abandoned mining camp east of Great Island, the Seal River environment has remained virtually unchanged throughout recorded history. Virtually no man-made alterations to the environment are present, and the river exists in a pristine state.

3.1.3 **Recreational Values:** Both CHRS guidelines for recreational value are met:

1. Recreational Experience Based on Natural and Human Values

   - to those who can meet its challenges, the Seal River provides an outstanding whitewater wilderness experience over two distinct life zones. Opportunities for wildlife viewing, including viewing of seals and whales, are unsurpassed by any comparable rivers. The eskers offer excellent hiking opportunities to explore the lands along the rivers. Major potential exists to interpret and appreciate the existence of Canada's first peoples, the hardships faced by European explorers such as Hearne, and Canada's northern mining traditions.

2. Capability to Support Recreation Without Loss of Values

- current use levels are low and environmental impact is likely to be negligible at these levels. While it is felt that the river can handle the compatible recreation opportunities recommended in the plan, the potential for an increase in recreational use requires ongoing monitoring to protect heritage values and the quality of the recreational experience.

3.2 RECREATIONAL USE

Recreational use has been another major factor in plan development. The unaltered natural condition of the Seal was the prime rationale for the river's nomination. The area's unspoiled wilderness character is not only its strongest recreational asset, but is the primary expectation of the majority of recreationists and vicarious users alike. User expectations and the low biological productivity of the area combine to yield a low recreational carrying capacity for the Seal River.

The present low levels and types of recreational use along the river appear to be well within these capacities. It is a significant consideration, however, that a major increase in use may occur as a result of general recreational trends and a higher public profile for the river resulting from its inclusion in the CHRS. Such an increase has implications for protection of sensitive areas such as eskers and archaeological sites, recreational experience, adequacy of services and infrastructure, and biological and recreational carrying capacity.

Types and concentrations of use must also be considered. In the past there has been only limited private sector interest in establishing small-scale tourist fishing lodges along the Seal. The confined nature of the river corridor, wilderness expectations and low capacity for sustained, localized angling pressure tend to constrain the potential for tourist lodge establishment.

Another recreation issue concerns priority for establishment of outfitting businesses. At present, there are no accommodations or visitor services along the Seal River. A few operators out of Churchill, Lynn Lake, Flin Flon, The Pas, Thompson and out-of-province will currently outfit parties for trips down the river. If levels of recreational demand and use rise, there may be further opportunities for viable outfitting operations to be established for the Seal River. As long-time area residents, considerable justification and support exist for giving priority to Tadoule Lake and Churchill residents to set up or participate in such operations. In addition, Tadoule Lake offers a landing strip serviced by scheduled air service from Thompson, a grocery store and a nursing station. Situated 20 km upstream of Shethanei Lake, it is a logical starting point for a trip down the River. It should be noted that Tadoule Lake residents would have to overcome the barriers of remoteness from the marketplace and limited capital funding in order to complete with other operators in the tourism market. Working jointly with marketing or development companies could, however, result in employment opportunities associated with guiding and outfitting.

The Seal River is an extremely demanding waterway characterized by large sets of rapids, submerged boulder fields, swift-flowing water, rough terrain, remoteness and the treacherous shoreline and tides at the river estuary on Hudson Bay. Its primary recreation asset is its wilderness environment. These qualities limit recreationists to those experienced and familiar with the demands of the northern wilderness and big river whitewater. With the designation of the river, therefore, a serious responsibility will lie with managing agencies to provide a basic level of services, facilities and information that promote and enhance visitor use and safety. The resource management objectives which protect the wild nature of the river will be the primary determinant of the degree to which these services and facilities are provided.

3.3 MINING

A third major factor in plan development is the mineral potential of the Seal River area. For parts of its length, the river crosses a "Greenstone Belt" which has medium to high mineral potential. At present, there is no mining taking place in the area. Since 1986, however, a number of mining companies have been actively exploring the portion of this belt called the "Great Island Belt", which extends along the river. Substantial investments have been made to determine this area's potential for gold mining, and interest in the area is continuing. In the event that a major commercial discovery is made, it is conceivable that there will be a request for full scale mining, necessitating, for example, all weather roads and settlement.

The protection of heritage values and resources and recreational experiences are the major concerns respecting mining and exploration activity along the Seal River. Natural heritage resources of particular concern include water quality, sensitive natural areas such as eskers, and wildlife populations. The resident seal population and the concentration of beluga whales at the estuary are particularly important because of the lack of even baseline information regarding their ecology and utilization of the Seal River environment. Human heritage resources of concern include the numerous prehistoric and historic archaeological and sacred sites found along the river, most notably at esker locations and Great Island. These sites and areas represent an undisturbed record of a long and significant tradition of resource use and occupation by northern Manitoba's first peoples. Recreation resource concerns focus on the protection of the river's primary recreational asset; its ability to provide users with a wilderness experience. Mining exploration and development has the potential to significantly impact upon this ability through its effect on the area's scenic vistas, remote condition and hiking and wildlife viewing opportunities. Ways of minimizing the impact of mining can, however, be found. Such a process has successfully been implemented in Grass River Provincial Park where a variety of protective conditions are applied through a provincial permitting process. Development of conditions appropriate for the Seal River will involve coordination between DNR, Manitoba Energy & Mines and the mining sector. Implications are for the protection of the wilderness environment, solitude, scenic areas, wildlife viewing and hiking opportunities.

3.4 HYDRO

The Seal River and its watershed presently flow in an unaltered and natural state. The Seal River has been identified as having potential for hydro electric development by Manitoba Hydro. Two development scenarios have been identified, involving either a diversion scheme or dam construction on the river. Diversion of the Seal River waters through a canal between the Seal and the Churchill River watersheds would augment the Nelson River flow and increase its generating potential. Nine sites along the Seal have varying potential for dam construction and power generation. Both scenarios are long-term considerations and no specific time frame for development has been given by Manitoba Hydro.

It is expected that Manitoba Hydro will request the Provincial Government to designate the Seal River and portions of the North and South Seal Rivers as "Water Power Reserves". Power Reserves are placed on Crown Lands to limit development to that consistent with hydro-electric power generation and associated water control. Water Power Reserve designation for the Seal would likely have little effect on the physical development accompanying Heritage River designation, since built facilities would likely be kept to a minimum, consistent with the wilderness objectives for the river. Power Reserve designation would, however, signal possible hydro-electric development of the river in the future.

Factors such as future demand and realization of the Nelson River hydro potential dictate that any development along the Seal is unlikely to occur for at least 25 - 40 years. This possibility is still an important planning consideration, however. Such developments would likely make it impossible to maintain the values for which the river has been nominated to the CHRS.

3.5 NATIVE USE

Another major planning consideration is that of resource use by the traditional inhabitants of the area through which the Seal River flows. The Seal River area has been inhabited for perhaps thousands of years by native people who evolved a nomadic culture geared to the migration of the caribou and fluctuations in fish populations. Archaeological remains found along the Seal attest to concentrations of people who enjoyed the relatively rich riverine environment. Samuel Hearne notes several groups of these people camped along the Seal and Shethanei Lake in 1770. These people are the ancestors of the present day inhabitants of northern Manitoba known as the Sayise-dene Chipewyan. The eastern population of these people is now mostly located at Tadoule Lake on the South Seal River, about 40 km upstream from Shethanei Lake. The Seal was also frequented by the Inuit, who populated the coastal regions of Hudson Bay. The Seal River area is only infrequently visted by the Inuit today, but retains a level of cultural significance for them.

Tadoule Lake residents still actively hunt and rely upon caribou from the Kaminuriak herd, whose winter range extends south of the Seal River, although few animals have been taken along the river in recent times. Depending on the vagaries of the herd's migration, it is possible that the Seal River area will be hunted during winter months. Apart from the native caribou hunt, the occasional moose, bear or gamebird are also taken in the area, usually coincidental with other activities such as trapping. A few Tadoule Lake residents trap in the areas west of Great Island. Overall, given present and likely future levels of native hunting and trapping, there is little or no conflict between these activities and Heritage River status.

While native use of the Seal River is presently limited to occasional seasonal hunters or trappers, Tadoule Lake residents feel a strong attachment to the Seal River and responsibility for its future. Acquisition of land owed through Treaty entitlement, freedom of use, movement, enjoyment of resources on lands traditionally used by their ancestors and realization of opportunities for economic development are the primary concerns motivating Tadoule Lake's perceptions and opinions with regard to Heritage River designation. Residents have a strong desire to be involved in any planning for the Seal River. The southern Inuit people have also expressed a desire to be involved in resource use decisions in the area because of their tradition of resource use in the coastal region and because of their territorial rights offshore in the Seal River estuary. Federal government agencies responsible for the management of offshore resources such as the Departments of Indian and Northern Affairs, Fisheries and Oceans and Environment Canada must also be involved in any future management planning process for the estuary.

3.6 RESULTS OF PUBLIC PARTICIPATION

A major component of plan preparation has been the solicitation of public concerns, needs and interests with regard to Heritage River designation and management. To achieve this, a public participation program was held from July, 1988 through to June, 1989, the objectives of which were to introduce the Heritage River concept, solicit initial response and acquire input into the plan. Target groups were the residents of Churchill and Tadoule Lake, two communities in the immediate Seal River area. Preliminary consultations were also held with community representatives from Arviat, N.W.T., and interested groups and individuals in Winnipeg.

Preliminary consultations with community representatives were held prior to public meetings in Churchill and Tadoule Lake. Consultations in Churchill involved the mayor, Chamber of Commerce and Tourism Association representatives, the chairman of the Churchill Land Use Committee and the local government administrator. Consultations in Tadoule Lake involved the Chief and Council. In Arviat, consultations involved the mayor and representatives of the local Hunter/Trapper Association and the Inuit Cultural Institute. Responses obtained from Arviat participants were considered representative of the community's concerns, and no further meetings were held during the first planning phase.

Public meetings were held in Tadoule Lake in October, 1988, and in Churchill in December, 1988. Meetings were well attended in Tadoule Lake. Low attendance at the Churchill meetings was attributed to sufficient representation of the community's concerns during preliminary consultation. The desire for continued involvement throughout Heritage River management planning was expressed throughout the participation program by residents of both communities.

Initial response to the idea of Heritage River designation has been extremely positive. A summary of the responses received during the program to date is presented below.

Public Responses

- A very strong public feeling was expressed that the wild nature of the Seal be preserved, and that a management plan should pursue this as its main goal. The pristine environment of the Seal is seen as its greatest asset, and the need to carefully regulate recreation types and levels to avoid overdevelopment and loss of wilderness quality and recreational experience is a major concern.

- Tourism outfitting opportunities and potential were seen as important to the northern economy. Promotion of these opportunities was seen as a crucial component in tourism development.

- Both Churchill and Tadoule Lake residents proposed a local resident priority for setting up guiding operations and providing tourism and recreation services.

- There was considerable concern voiced regarding the potential for hydro-electric development of the Seal. It was generally perceived by the public that enough rivers have been dammed or diverted in northern Manitoba, and that the Seal, as one of the last great wild rivers in the province, should be maintained in its wild state, free from any hydro developments.

- Residents of Tadoule Lake were opposed to mining activity, especially in the Great Island area which is spiritually important to the Chipewyan people. Churchill residents felt that mining could be accommodated along the river, provided that stringent controls and regulations are placed on all activities to protect the river, particularly the seals, beluga whales and sensitive sites.

- A significant concern was raised regarding the effect of Heritage River designation on native use of the area. Tadoule Lake residents stated that they require the continued and unaltered use of the river for traditional pursuits such as hunting, trapping, fishing and recreation. They also stressed that designation should in no way affect any native land claims process.

- Churchill and Tadoule Lake residents clearly stated their desire to be involved in the planning process for the river. Heritage river designation is considered as an important resource issue in their region.

4.0 - GOALS AND OBJECTIVES

Analysis of the six background information categories has resulted in the development of management goals for the Seal River. Each goal is followed by specific objectives which define the goal and management program requirements. Goals and objectives reflect the CHRS principles of heritage value recognition, protection and enjoyment, as well as the need to accommodate commercial resource use and to provide for regional participation in river management. Management activities and actions required to meet the goals and objectives are presented in Section 5.0 - River Management Program.

4.1 HERITAGE RESOURCES

Proposed Management Goal: Heritage values and resources shall be protected and managed to ensure perpetuation of values basic to Heritage River designation and status.

Proposed Management Objectives:

- To establish guidelines which protect and maintain the significant heritage values found along the river including water, fish, wildlife, geological features, landforms, vegetation, archaeological remains and spiritually significant areas.

- To identify significant heritage resources and recommend site-specific management policies and programs for their protection.

- To establish a monitoring system to detect erosion of heritage resources and values, and to identify procedures that restore values when required.

4.2 RECREATION RESOURCES

Proposed Management Goal: Appropriate and compatible recreation opportunities which ensure that heritage values and wilderness experiences are adequately protected will be provided so that the public can visit, appreciate, understand and enjoy the resources of the Seal River.

Proposed Management Objectives:

- To establish guidelines which protect and maintain the significant recreation resources found along the river.

- To identify high value recreation resources and recommend site-specific management policies for their protection.

- To provide recreational services that facilitate recreational enjoyment of the river, and are compatible with the river's wilderness character.

- To inform the public of recreational activities and opportunities, heritage values, and facilities and services in order to facilitate use and enjoyment of the river.

- To promote visitor safety by establishing a central trip registry and preparing an informational brochure which details conditions and hazards.

- To establish a monitoring system to detect erosion of recreation resources and recommends actions that restore values when required.

4.3 COMMERCIAL RESOURCE USE

Proposed Management Goal: Commercial resource use and associated activities will be managed to ensure perpetuation of values basic to Heritage River designation and status. The option to review the Heritage River status in the event of a proposed provincially significant hydro or mining development will be maintained.

Proposed Management Objectives:

- To accommodate commercial utilization of resources where it does not lessen future recreational use potential or unduly compromise the primary purposes of the Heritage River;

- To establish standards which limit impacts from commercial resource use on significant heritage values to levels which do not degrade these values.

- To establish a monitoring system to detect erosion of heritage values, and to establish procedures that restore values when required.

4.4 REGIONAL INTEGRATION

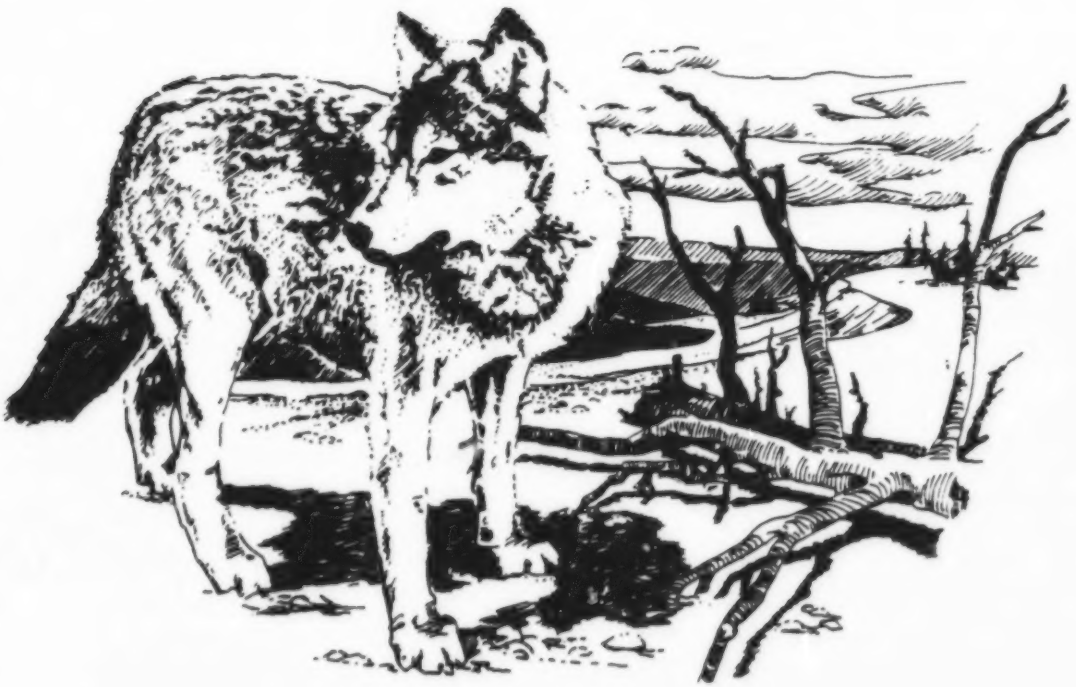
Proposed Management Goal: Ongoing planning and management of the Seal Heritage River will be integrated with regional concerns and wishes to the greatest extent possible.

Proposed Management Objectives:

- To involve local communities and regional managing agencies in the preparation and implementation of specific management and development programs for the river.

- To benefit local communities through economic spinoffs associated with Heritage River status - such as employment, tourism or entrepreneurial opportunities - to the greatest degree possible.

- To incorporate traditional native use of the area as an integral part of the river's heritage values, and ensure that these uses and future potential uses remain unaltered as a result of Heritage River designation.



5.0 - RIVER MANAGEMENT PROGRAM

Management of the Seal River will be guided by zoning and specific actions intended to meet the goals and objectives. Three zones are identified: the Heritage River Corridor, which defines the river's boundaries; Special Management Areas, which comprise especially sensitive features; and Special Development Areas, where future tourism facilities could be established within the corridor. These zones, and guidelines for uses and activities within them, are discussed below. Also discussed are recommended management actions for heritage and recreation resources, commercial resource use and regional integration.

5.1 HERITAGE RIVER CORRIDOR

The Heritage River corridor has been defined using four criteria. They are:

- to include all the key heritage resources and the range of biophysical features that demonstrate the river's significant heritage values and unique and representative environment;
- to encompass an area of natural environment large enough to provide opportunities for solitude, primitive types of recreation and interpretation of heritage values;
- to include a sufficiently large area to allow for effective management of any intensive, potentially conflicting activities;
- to include as small an area as possible while providing for all of the above, so that any potential conflicts with other resource uses are minimized.

Based on these four criteria, the Heritage River corridor has been identified to include the Seal River from the west end of Shethanei Lake up to, and including, the estuary shoreline. Both river channels at Great Island are included. Its width is slightly over 2 km, encompassing the river and 1 km on either side (see Figure 4).

GENERAL GUIDELINES FOR THE HERITAGE RIVER CORRIDOR ARE:

- Resources and heritage values deemed significant under CHRS guidelines, and which contribute to the essential wilderness character of the river, are to be conserved, protected and administered so that they remain undisturbed by recreationists and resource users.

- Recreationists and resource users may utilize the resources in the corridor where these uses do not significantly impact upon heritage and recreation values.

- Recreational use and enjoyment of the Seal River corridor is to be enhanced by providing facilities consistent with the river's wilderness character.

5.1.1 Special Management Areas

Nine areas within the Heritage River corridor have been identified as requiring special management consideration. These Special Management Areas (SMA's) are site-specific and require a higher level of attention because of their associated special qualities, features and management needs. Resource preservation is the primary purpose of these areas. They include features which are either unique, rare, or endangered, require special management techniques, are culturally significant, or are excellent representations of the heritage values for the river. SMA designation recognizes their fragile or sensitive nature, and management efforts will ensure preservation of the specific resource or area. SMA locations are presented in Figure 4.

GENERAL GUIDELINES FOR SMA'S ARE:

- All tourism or other developments, industrial resource exploration and extraction which would disturb the ground surface or vegetation of an S.M.A. are prohibited.

- Information will be provided to river users on the sensitivity of these areas, and ways to avoid damaging them.

- Each SMA will be inventoried and a site-specific Special Management Area Program which details preservation methods, a monitoring program, research needs and, if necessary, possible methods of rehabilitation will be prepared.

5.1.2 Special Development Areas

The purpose of Special Development Areas is to provide for the development of centralized river access points and appropriate sites for recreational services and facilities (see Figure 4). Two areas within the Heritage River corridor have been identified as Special Development Areas because of their potential roles as access points and service areas, and requirements for visitor safety.

GENERAL GUIDELINES FOR SPECIAL DEVELOPMENT AREAS ARE:

- The development of small-scale tourist/recreation facilities such as a mini-lodge will be directed to Shethanei Lake;

- A bear-proof camping/pick-up facility will be constructed at the estuary.

5.2 HERITAGE RESOURCES

5.2.1 Natural Heritage Resources

Water and Aquatic Resources

As the primary resource, every effort shall be made to protect the Seal River's surface and groundwater quality in the corridor. Waters within the corridor will be classified as "Exceptional Value Waters" under the Manitoba Surface Water Quality Objectives. The Exceptional Value Waters classification states:

"Water courses designated as such should not receive any alteration that result in measurable, calculable or perceived water quality degradation or depredation of other values deemed acceptable."

Exceptional Value Waters designation of the Seal River will guide licencing, monitoring and enforcement of water quality objectives by providing standards suitable for high quality water maintenance and management.

At present, very little is known about the population dynamics of fish in the river. This lack of information, combined with the relatively low productivity of the system, the potential increase in angling pressure resulting from a possible rise in recreational use, and the apparent importance of fish to the river's seal population, demonstrates the need for a preliminary study of fish ecology for the river. Existing data gathered during a previous limnological study of the Seal River by the Manitoba Department of Environment, Workplace Safety and Health in 1979 will provide sufficient information to undertake this preliminary assessment. Sport fishery management requirements are covered under "Recreational Use" in 5.4.

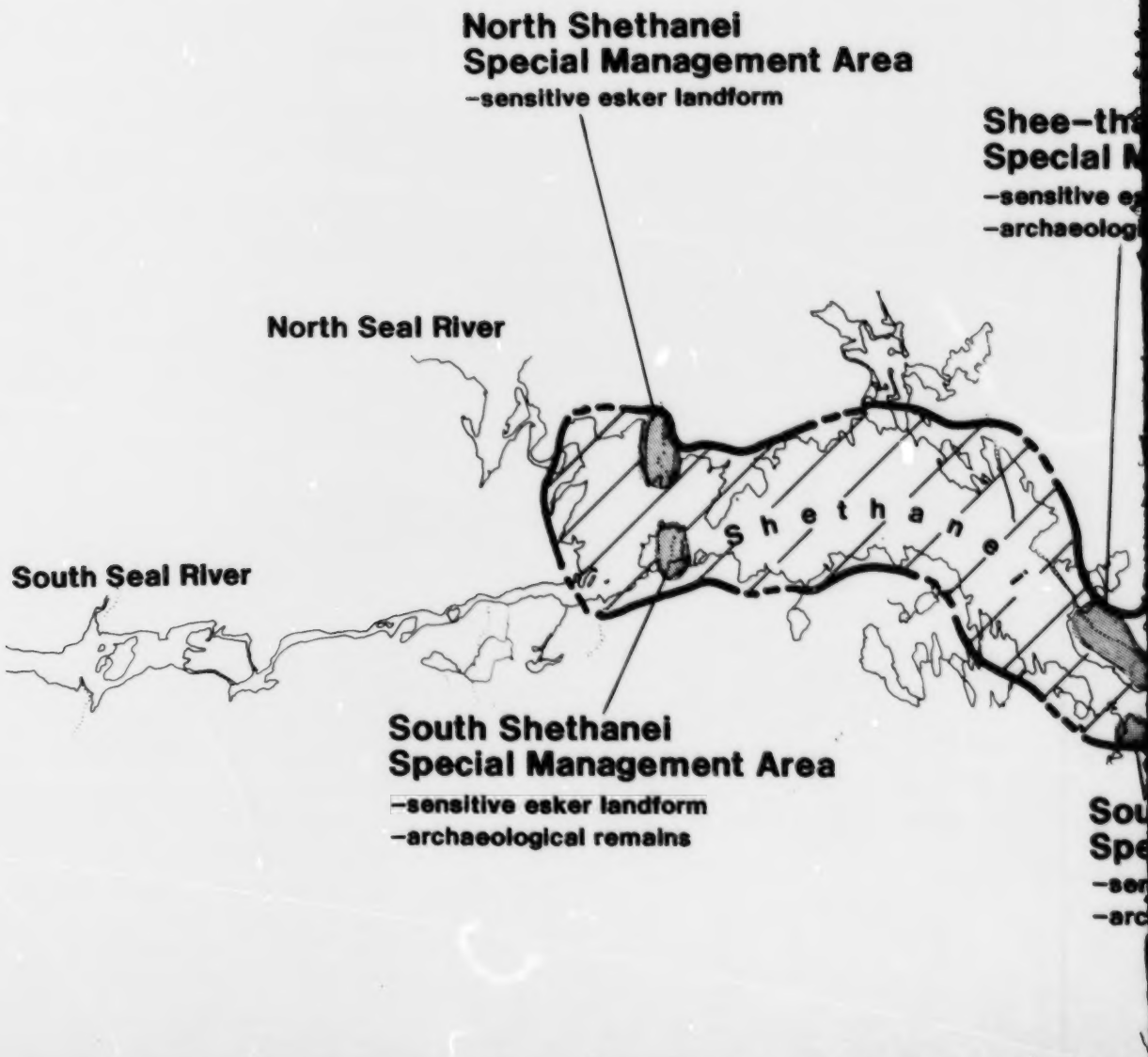
The significant concentrations of beluga whales in the estuary may have implications for inter-provincial management. Liaison with relevant federal, territorial and provincial management agencies would be required.

Recommended management actions for water and aquatic resources are:

- **begin proceedings with Manitoba Environment Workplace Safety and Health to classify the Seal River as an "Exceptional Value Water";**

- **work toward the classification of the North and South Seal and Wolverine Rivers as Exceptional Value Waters in order to provide for the long-term preservation of watershed integrity;**

- **in cooperation with the Water Survey of Canada and Manitoba Water Resources, acquire baseline water quality information to support enforcement of the Exceptional Value Waters classification, and establish an annual water quality monitoring and sampling program as a way of detecting changes to water quality over time which would include monitoring sites along the North and South Seal and Wolverine Rivers;**


North Shethanei
Special Management Area
–sensitive esker landform
Shee–th
Special M
–sensitive e
–archaeolog
North Seal River
Shethanei
South Seal River
South Shethanei
Special Management Area
–sensitive esker landform
–archaeological remains
Sou
Spe
–se
–arc

West Great Island
Special Management Area
- sensitive esker landforms
- aesthetics
- concentration of moose, waterfowl
- archaeological remains
- native spiritual significance

1950's Mining Exploration Camp
Special Management Area
- period buildings, structures, industrial artifacts

Wolverine River

Wolverine River Esker
Special Management Area
- sensitive esker landform
- archaeological remains

Shee-than-nee
Special Management Area
- sensitive esker landform
- archaeological remains

Seal River

Great Island

Lake

Shethanei Lake
Special Development Area

East Seal Esker
Special Management Area
- sensitive esker landform
- archaeological remains

South Shee-than-nee
Special Management Area
- sensitive esker landform
- archaeological remains

Legend

Heritage River Corridor

Special Development Area

Special Management Area

N

2.5 0 2.5 5.0 7.5
km

Area

erfowl

1950's Mining Exploration Camp
Special Management Area
–period buildings, structures,
industrial artifacts

R i v e r

a t I s l a n d

East Seal Esker
Special Management Area
–sensitive esker landform
–archaeological remains

Seal River Mouth
Special Development Area

Estuary
Special Management Area
–concentration of beluga whales
–aesthetics
–presence of polar bears,
rare plant species
–access zone

N

2.5 0 2.5 5.0 7.5
km

Figure 4

Heritage River Corridor and Management Areas

Seal River

Draft Heritage River Management Plan

February 1990

- using existing data, complete a preliminary assessment of fish ecology, considering aspects of species composition, water quality, habitat, aquatic invertebrates, and food chain dynamics in order to better understand fish and seal ecology and the potential impacts of resource use and harvest;

- consult with Canada Fisheries and Oceans, the Government of N.W.T. and agencies such as the World Wildlife Fund and the Keewatin Wildlife Federation to develop cooperative management activities for the estuary. This approach would have as its goal a sharing of information and a common understanding for the overall sustained development of the resource base.

Vegetation

Management activities are to be directed at maintaining natural processes in keeping with the river's wilderness character, and monitoring sensitive areas for human disturbance. The role of fire in the ecology of northern forests is recognized.

Recommended management actions for vegetation are:

- identify areas, particularly along eskers, beaches and other sensitive landforms, which contain rare, unique and endangered species or communities along the river;

- monitor through yearly survey any alteration to the above areas;

- where possible, rehabilitate or stabilize plant communities and associated landscapes altered by human activities to their naturally appearing form, or to a point where natural processes are re-established.

Wildlife

The small size of the Heritage River corridor limits opportunities for active wildlife management activities. Recommended actions provide for the establishment of baseline information on the harbour seal, a species identified as an important heritage resource. The extended use of the river as habitat by seals warrants research into this little-understood adaptation. Actions should be directed toward the monitoring of the seal population and better understanding their role in the riverine environment. Other significant species such as the caribou, beluga whale and polar bear are being actively researched by territorial governments and other management agencies. Management implications and relevance of this information should be assessed, and actions developed as needed. Native wildlife use is addressed in 5.5.

Recommended management actions for wildlife are:

- work with federal and provincial wildlife agencies to determine temporal and geographical distribution of seals in the watershed, and their utilization of the river in terms of food, habitat and reproduction as well as predator/prey relationships (see Water and Aquatic Resources);

- encourage research on other significant heritage species within the corridor, and liaise with relevant agencies (e.g. universities) for assistance and exchange of information.

5.2.2 Human Heritage Resources

While the simple monitoring of culturally significant areas may be suitable in areas where enforcement is possible, protection of the cultural resources in the remote area of the Seal River requires the identification and assessment of archaeological and ethnographic sites before any impact can occur. DNR will work with the Tadoule Lake community and Manitoba Historic Resources in developing an approach to protection and management of human heritage resources.

Recommended management actions for human heritage resources are:

- in cooperation with the Tadoule Lake community, complete an archaeological survey begun with the Seal River Background Study in 1986 and the Archaeological Survey of the Seal River in 1988 of the south shore Shethanei Lake esker and the Great Island north channel esker (see 5.5 - Regional Integration);

- salvage, analyze and record any significant artifacts which may be subject to illegal removal;

- identify the cultural significance of Great Island by completing an ethnographic survey of the Tadoule Lake/Fort Churchill Band and make recommendations for the management of this area based on the findings of these surveys;

- avoid direct locational reference to known archaeological remains and spiritual sites. Interpretation of cultural heritage should focus on cultural values of the native people, rather than the physical record of their presence along the river.

5.3 RECREATION RESOURCES

Recreation management focuses on the provision of low intensity wilderness whitewater canoeing and rafting and the protection of the wilderness character of the corridor. At present, the river exists in a wild state with recreational infrastructure virtually non-existent. A basic level of services for river travellers must be provided, such as access services, primitive physical development, and river information packages also intended for use by the general public. Visitor safety will be emphasized in all information. The communities of Churchill and Tadoule Lake will be involved in the establishment of outfitting operations (see 5.5 - Regional Integration). The potential for an increase in recreational use requires the implementation of an impact monitoring program.

Licencing and operational guidelines for tourism opportunities such as canoe outfitting should be developed between DNR and Manitoba Industry, Trade and Technology (ITT) as the provincial licencing body. Guidelines should recognize wilderness preservation as the highest priority, and address carrying capacities, restrictions on hard facilities levels and types of use within this framework. Interpretive and information programs should also be developed in co-operation with ITT.

The confined nature of the river corridor, wilderness user expectations and low capacity for sustained, localized angling pressure preclude commercial outcamp or boat cache establishment along the river. Shethanei Lake, however, may be suitable for a small-scale "mini-lodge" consistent with plan recreation objectives and expectations. A mini-lodge on Shethanei may also complement river recreation objectives by providing an access and supply service to travellers, thus facilitating use and enjoyment of the river. Careful siting and the determination of optimum camp size based on a biological sport-fishing assessment are prerequisites of camp establishment on Shethanei.

The estuary shoreline is also identified as suitable for limited infrastructure development. Special Development Area guidelines apply to Shethanei Lake and the estuary shoreline (see Sec. 5.1.2 and Figure 4).

Recommended management actions for recreational use are:

- Establish a central registry in Churchill to collect data on user origin, age, length of journey, point of departure, method of transport, secondary activities, party size, wildlife observations, likes, dislikes, angling level and success, and overall impressions;

- prepare and circulate a high quality brochure/poster aimed at the general public and potential river travellers, which presents:
  - visual highlights of the river
  - a river guide which outlines river difficulty, equipment needed, locations of campsites, weather, type of experience, logistical information, CHRS information, the role of the Seal in the CHRS, natural, cultural and recreation values and importance, and backcountry travel ethics.

- encourage active private sector involvement in the provision of outfitting and access service opportunities (see Sec. 5.5);

- develop a public safety plan which identifies evacuation procedures, registry points and provision of information;

- permit establishment of a small-scale tourist outcamp/mini-lodge establishment on Shethanei Lake within the limits of resource carrying capacity and Special Development Area guidelines (see Sec. 5.1.2);

- construct a bear-proof camping and pick-up facility at the estuary;

- promote a high-quality sport fishery, including catch-and-release/barbless guidelines;

- promote no-trace/low-trace camping;

- mark primitive portages around major sets of rapids;

- permit resident sport hunting at present levels of use (note: native subsistence hunting guidelines are included under Regional Integration);

5.4 COMMERCIAL RESOURCE USE

Commercial resource uses will be permitted within the corridor where these uses do not significantly impact on heritage values, wilderness quality, recreational use and enjoyment of the river. Activities with low impact on the river corridor, such as prospecting, may be permitted by the regional Manitoba Natural Resources office after review by the Thompson Resource Planning Committee. All major commercial resource use activities will be subject to an environmental assessment and review process to determine suitability of proposed and ongoing uses, and to evaluate impacts. The review process will follow the provincial framework and processes existing at the time. Any proposed developments will be addressed on a case-by-case basis. Project proponents will be required to provide detailed development and abandonment plans. Terms and conditions will address the various regulations under The Mines Act, The Environment Act, The Canada Fisheries Act and the Manitoba Surface Water Quality Objectives and will consider:

- site clearing and visual buffers;
- access roads and air traffic movements;
- river crossings (e.g. bridges, hydrolines);
- construction camps;
- handling of waste rock;
- sewage disposal;
- operations, plans and schedules;
- storage of materials (ores, tailings);
- site rehabilitation.

In the event that a hydro-electric or major mining resource investigation or development is proposed that exceeds the conditions for maintenance of heritage values and Heritage River status, all options for river use will be reviewed. If the Province of Manitoba determines that provincial interests are best served by other resource uses, Heritage River status will be removed if necessary.

Recommended management actions for commercial resource use are:

- ensure that standards requisite for "Exceptional Value Waters" under the Manitoba Surface Water Quality Objectives are the primary criteria for assessing commercial resource use proposals that may affect water quality;

- direct all mining and exploration activities away from areas directly adjacent to, or visible from, the river, and away from direct-source streams. This applies to all clearings, structures and infrastructure, including buildings, headframes, construction camps, all-weather and winter roads and borrow pits;

- prohibit disposal and treatment of domestic and industrial waste within the corridor.

5.5 REGIONAL INTEGRATION

The commitment to regional integration in the planning and operation of the Seal Heritage River is required for three main reasons. First, this commitment recognizes the tradition of occupation and resource use of the Seal River by area residents, extending possibly as far back as several thousands of years. Second, it is recognized that Heritage River designation may affect surrounding regions and communities in a variety of ways. By managing the resources in a manner sensitive to regional concerns and aspirations, managing agencies can fulfill the mandate for Heritage River designation and management in ways which will be beneficial to the region. Third, close cooperation and communication with regional resource managers, municipal governments, tourism associations, native councils, area residents and industry will help identify management needs and therefore will contribute to the continuing success of the finished plan.

Recommended management actions for regional integration are:

- form an advisory group of representatives from Churchill, Tadoule Lake and the provincial departments of Business Development and Tourism, Culture, Heritage and Recreation and Natural Resources to provide input on tourism, outfitting, employment opportunities, research, traditional resource use, and protection and management issues within the corridor;

- tender an outfitting development opportunity for private operators in Tadoule Lake and Churchill;

- ensure the protection of native traditional resource use, access to land and land claim rights through the preparation and circulation of a "Memorandum of Understanding" between the Province of Manitoba and relevant persons and agencies that states that Heritage River designation and operation will not affect these concerns.

5.6 PLAN IMPLEMENTATION AND ADMINISTRATION

Plan implementation and administration will be the responsibility of DNR. The Department will act as the chief administering agency and will oversee and approve all advisory committee operations and management activities.

Recommended actions are:

- prepare a formal submission to DNR designating the corridor as a "Permanent Crown Land Reservation" under The Crown Lands Act, thereby establishing an administrative basis for management of the Seal Heritage River;

- establish a seasonal, two-person "river steward" patrol under the classification of "Special Officer" (DNR) originating from Tadoule Lake, to monitor the impacts of recreation, resource use and harvest, to assist in enforcement and to acquire general information on management needs on the river;

- establish the Northern Regional Planning Committee (Thompson) within DNR as the primary agency responsible for management of the Seal Heritage River. One member of the Committee should be assigned Heritage River program management responsibilities.

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